

## Castrol Brayco 363

Lubricating Oil, General Purpose  
Low Temperature

### Description

Castrol Brayco™ 363 is a highly refined blend of petroleum base stock and additives, which provide excellent resistance to oxidation, protection against rusting, and limits galvanic corrosion.

### Application

Brayco 363 is designed for use as a general purpose, low-temperature lubricating oil for operation in the temperature range of -65°F to 250°F (-54°C to 122°C). It is especially useful where a light oil with a low evaporation rate which provides rust protection is required.

### Typical Characteristics

Test	Method	Units	MIL-PRF-7870C Requirements	Result
API Gravity	ASTM D287	degrees		28.8
Density @16°C/60°F	Table 8	Lbs/gal		7.3
Appearance	Table 8	Pass/Fail	Clear, transparent and uniform	Pass
Color, ASTM	ASTM D1500	Report	5 Maximum	<2
Viscosity				
@38°C/100°F	ASTM D445	cSt	10 Minimum	10.3
@-40°C/-40°F			4000 Maximum	3500
Flash Point, COC	ASTM D92	°C/°F	130/265 Minimum	146/295
Pour Point	ASTM D97	°C/°F	-57/-70 Maximum	<-60/-75
Precipitation Number	ASTM D91	ml	0	0
Copper Strip Corrosion, 3 hours @100°C/210°F	ASTM D130	Pass/Fail	1a Maximum	Pass
Corrosion-Oxidation Stability, 168 hours @122°C/250°F				
Corrosion, pitting, or etching		Report	None	None
Wt. change,				
Copper		mg/cm <sup>2</sup>	±0.2 Maximum	- 0.035
Steel		mg/cm <sup>2</sup>	±0.2 Maximum	+ 0.0003
Aluminum	ASTM D4636	mg/cm <sup>2</sup>	±0.2 Maximum	+ 0.0004
Magnesium		mg/cm <sup>2</sup>	±0.2 Maximum	+ 0.0071
Cadmium		mg/cm <sup>2</sup>	±0.2 Maximum	+ 0.004
Separation or Gummying		Report	None	None
Change in Viscosity @ 100°F (38°C)		%	-5 to +20	+ 6.01
Change in Neutralization No.		Report	0.2 Maximum	+ 0.06
Oil Weight Loss		%	8 Maximum	2.57

Test	Method	Units	MIL-PRF-7870C Requirements	Result
Protection of panels, 100 hrs minimum	Spec 4.4.3 ASTM D1748	Pass/Fail	Pass	Pass
Low Temperature Stability, 72 hours @-54°C/-65°F	Spec 4.4.4	Pass/Fail	No gelling or separation	Pass
Evaporation Loss, 22 hrs @100°C/210°F	ASTM D972	% wt.	25 Maximum	18
Corrosivity Test, 10 days @ 27°C/80°F	Spec 4.4.5	Pass/Fail	No pitting, corrosion, or attack	Pass
Workmanship	Spec 3.7	Pass/Fail	Pass	Pass

Subject to usual manufacturing tolerances.

## Additional Information

### Specification

Brayco 363 meets the requirements of and is qualified to MIL-PRF-7870C. This fluid is identified by NATO Code Number: O-142.

### Shelf Life

Brayco 363 has a maximum recommended shelf life of 6 years from date of manufacture. This shelf life assumes that the product is stored in its original unopened packaging in ambient temperature conditions.

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